

ICIC RESPONSE TO BELLCORE
FOR
BELLCORE COMMENTS TO ICIC-AR-101

1. Provision of CIP to ICs (page 8):

BELLCORE

- Inconsistency:

With one exception (Section 4.2), AR-ICIC-101 indicates CIP should always be sent to all ICs.

ICIC RESPONSE

AR-ICIC-101 section 4.1.1, paragraph 2 states, "For calls specified in this document, the optional parameter, Carrier Identification Code (CIC) parameter, is to be included for all feature group D calls delivered to the interexchange carrier with one exception. The exception case covers call dialed 950+. In these situations, the CIC parameter need not be included."

In addition, AR-ICIC-101 section 4.2, states that the LEC switching entity should be able to provision the Carrier identification code parameter on a per IC basis.

The ICIC is unable to understand Bellcore's determination of inconsistency on this point.

BELLCORE

- Clarification Needed:

Specific provisioning of CIP desired by ICs. Provision as:

1. Always sent (all ICs)?
2. Per IC (for all values of CIP assigned to IC)?
3. Per CIP value?
4. Other?

ICIC RESPONSE

See above response on provision of CIP to ICs. The ICIC requests that the carrier identification code be delivered on a per IC basis. If an IC has arranged for the delivery of the CIC parameter and the IC has more than one carrier identification code, then, for each call, the LEC network should determine the CIC parameter value as described in Section 4.1.1.

ICIC RESPONSE TO BELLCORE
FOR
BELLCORE COMMENTS TO ICIC-AR-101

2. Value of Carrier Identification Code - Calls from non-conforming end-offices (page 10):

BELLCORE

- Clarification Needed:
 1. In section on Feature group D, but are these FG-D calls?
 2. Trunk selection process results in selection of trunk, but how should Carrier ID code be determined (if IC has multiple ones)?
 3. Requirements (Bellcore's) state that TR-317 procedures are used for calls from non-conforming end-offices interworking to SS7; CIP is TR-394 procedure

ICIC RESPONSE

The access requirements specified in AR-ICIC-101 provide that the LEC switching entity deliver a carrier identification value when calls are interworked to SS7 and delivered to the interexchange carrier at an access tandem. In the case where an interexchange carrier has multiple carrier codes, the LEC should be able to deliver a code value as bilaterally agreed to by the LEC and IC. The objective of AR-ICIC-101 is for the carrier identification code parameter to be delivered to the IC on all calls.

3. Coding of CIP (page 12):

BELLCORE

- Inconsistency:

ANSI specification (T1.113.3, sections 3.8A and 3.6(4), Draft issue 2) states bits 1-4 of octet 2 indicate "digit 1," the most significant digit of the carrier code. Bellcore requirements align with ANSI.

ICIC RESPONSE

The ICIC agrees with the Bellcore comment.

BELLCORE

- Clarification Needed:

Coding of bits 5-8 of octet 3. ANSI has all 0s. AR-ICIC-101 makes no mention of coding. Bellcore requirements align with ANSI.

ICIC RESPONSE

In Appendix A of AR-ICIC-101 (pg. 12), the diagram specifies that the coding of bits 5-8 in octet 3 are coded as zeros. This is in agreement with ANSI.

ICIC RESPONSE TO BELLCORE
FOR
BELLCORE COMMENTS TO ICIC-AR-101

4. 700/800/900 Calls (page 14):

BELLCORE

- Inconsistency

ANSI definition states CIP indicates transit network selected by originating subscriber. In AR-ICIC-101, CIP for 800/900 calls is based on terminating subscriber.

ICIC RESPONSE

The originating subscriber implicitly selects the interexchange carrier network by dialing an 800/900 call. Therefore it is appropriate that the carrier identification code determined from the translation of the SAC code digits should be forwarded to the IC.

BELLCORE

- Clarification Needed:
 1. ANSI definition (CIP based on originating subscriber) vs. AR-ICIC-101 specification.
 2. CIP coding for SSP functionality only specified for interworking MF-SS7 and SSP function at AT. Other cases to consider?

ICIC RESPONSE

See above response on interexchange carrier network selection for 700/800/900 calls.

Regarding the Bellcore comment on functionality, the AR-ICIC-101, Issue 1 requirements specify the delivery of the carrier identification code parameter for the SSP and MF-SS7 cases. Future versions of AR-ICIC-101 may address additional needs.

ICIC RESPONSE TO BELLCORE
FOR
BELLCORE COMMENTS TO ICIC-AR-101

5. Miscellaneous (page 16):

BELLCORE

Other cause values (e.g., "normal event - address incomplete") or inclusion of diagnostic with missing parameter name might provide for better troubleshooting. Have these been considered by ICIC?

ICIC RESPONSE

The ICIC considers the non delivery of the carrier identification code parameter to be an error condition, not a normal event as suggested in the Bellcore comment

ASSESSMENT OF 1/31/92 BELLCORE COMMENTS
AR-ICIC-101
CARRIER IDENTIFICATION CODE PARAMETER

1. **Provision of CIP to ICs**

Bellcore's response states that CIP will be provisioned to be sent to ICs on a per IC, per trunk group basis, and for all carrier identification code (CIC) values assigned to the particular IC. For direct SS7 trunks, all CIC values for the trunk group will be included in the IAM sent to the IC. For trunk groups common to all ICs, the CIP will be included in IAMs sent (if the IC has requested) to the IC from the BOC access tandem for all CIP values assigned to that IC.

ASSESSMENT: This is in accordance with the ICIC request.

2. **Value of Carrier Identification Code - Calls from non-conforming end-offices**

Bellcore states that for calls originating from non-conforming end-offices (e.g., #5 Crossbar, SXS), the resultant SS7 signaling to the IC will be as detailed in TR-317. TR-317 is not equal access signaling based. The BOCs concern is that they would face a complex development effort to develop this optionality, providing ever-decreasing value.

ASSESSMENT: The community of non-conforming offices is decreasing, and additionally, the percentage of traffic from these switches is small enough to consider this a minor issue.

3. **Coding of CIP**

Issue closed.

4. **700/800/900 Calls**

The BOCs are still at issue on delivering CIP on the MF-SS7 case. The BOCs are concerned about the extra processing involved at the tandem to map the "OZZ-XXX" value received in the MF signaling into the CIP parameter.

However, CIP will be delivered in the MF-SS7 case for 800 database calls. And, CIP is also being developed to support 700 & 900 calls.

ASSESSMENT: I recommend that the ICIC respond to this item restating the intent of the requirements and ask for technical justification on why this capability cannot be implemented.

5. **Miscellaneous - Error Treatment**

Bellcore requests advice on whether the ICs can accommodate sending a diagnostic along with an REL message with cause 'protocol error - unspecified' when CIP is expected but not received. Presently, the use of a diagnostic is not described in the access requirements.

ATTACHMENT VII

NEW BUSINESS AND
INTRODUCTION OF PROPOSED NEW ISSUES

Points Noted:

1. A new Issue, "CCS-7 Point Code and Switch I.D. Industry Wide Needs", was proposed.
2. It was suggested that the Issue proposed in Point Noted #1 may be more appropriately addressed by the OBF, as it appears to be an ordering procedure related to the ASR.
3. It was suggested that the network identification routing concerns described in this proposed Issue must be addressed before it can be discussed with the OBF.

Agreement Reached:

1. The proposed Issue, "CCS-7 Point Code and Switch I.D. Industry Wide Needs", was not accepted as a new Issue. However, the information provided with this proposed Issue Statement will be forwarded to the new Workshop created to address new Issue #274, to be addressed there. (See the Data Integrity Group Standing Committee section of these meeting notes.)

Points Noted:



4. A new Issue, "CCS7 Switch TCAP Message Routing", was proposed. See the Issue Statement and diagram in this Section of the meeting notes.
5. It was suggested that the selection of a Carrier to transport a TCAP message when a customer is updating their screenlist, and not placing a call, is under the purview of the associated local exchange carrier, as described in TA 606.
6. It was noted by the Issue Originator that this proposed new Issue suggests that there are other alternatives than the local exchange carrier selection of a carrier (the 'BCC Select Method') as described in Point Noted #5 -- for example, the End User PIC method -- that should be described in the appropriate specific feature document, which in this case would be TA 220.
7. It was suggested that the technical capabilities described in TA 606 and TA 220 are not mutually exclusive.
8. It was suggested that TA 606 describes the possible technical solutions for Carrier selection at the message level, and that the decision to use the BCC Select method as described in TA 220 is a business policy one that the local exchange carrier is entitled to make.

Agreement Reached:

- 2. The proposed new Issue, "CCS7 Switch TCAP Message Routing", was not accepted on the basis that it is not a national technical interconnection issue.

Points Noted:

9. MCI suggested that, from its perspective, it appears that most access providers present at this meeting are of the opinion that TCAP messages associated with interLATA screenlist editing (TA 220) do not need to be routed via the End User PIC method.
10. A new Issue, "Technical Interconnection and Routing Issues Associated with the Implementation of New Non-Geographic Codes", was proposed.
11. The Issue recommends that a Workshop be established to address the particular technical interconnection and routing arrangements, current or new, that may be used to provide new non-geographic services such as PCS.
12. A concern was expressed that acceptance of this new Issue should not be used to delay implementation of the PCS non-geographic service, as an example.
13. It was suggested that this new Issue, in terms of access arrangements that could be outlined, could have the potential to disrupt some service providers' plans re: implementation of new non-geographic services.
14. It was noted that, although it may be desirable, service providers' plans in terms of how they may impact access arrangements could only be discussed relative to this Issue to the extent they were non-proprietary.

Agreements Reached:

3. The new Issue, "Technical Interconnection and Routing Issues Associated with the Implementation of New Non-Geographic Codes", was accepted. The ICCF Issue number will be 275.
4. A new ICCF Workshop will be established to address Issue 275. Chris Kostenbader, Bell Atlantic Mobile, and Craig Wiseman, U S WEST, volunteered to Co-Chair the Workshop

ICCF ISSUE IDENTIFICATION FORM
ISSUE TITLE:
CCS7 Switch TCAP Message Routing

*ISSUE ORIGINATOR: J. Joerger
*COMPANY: MCI
*TELEPHONE #: 214-918-5137
*REQUESTED RESOLUTION DATE: ASAP
(optional)

ISSUE #:
DATE SUBMITTED: 9/17/93
DATE ACCEPTED:
WORKSHOP ASSIGNED:
CURRENT STATUS:
RESOLUTION DATE:

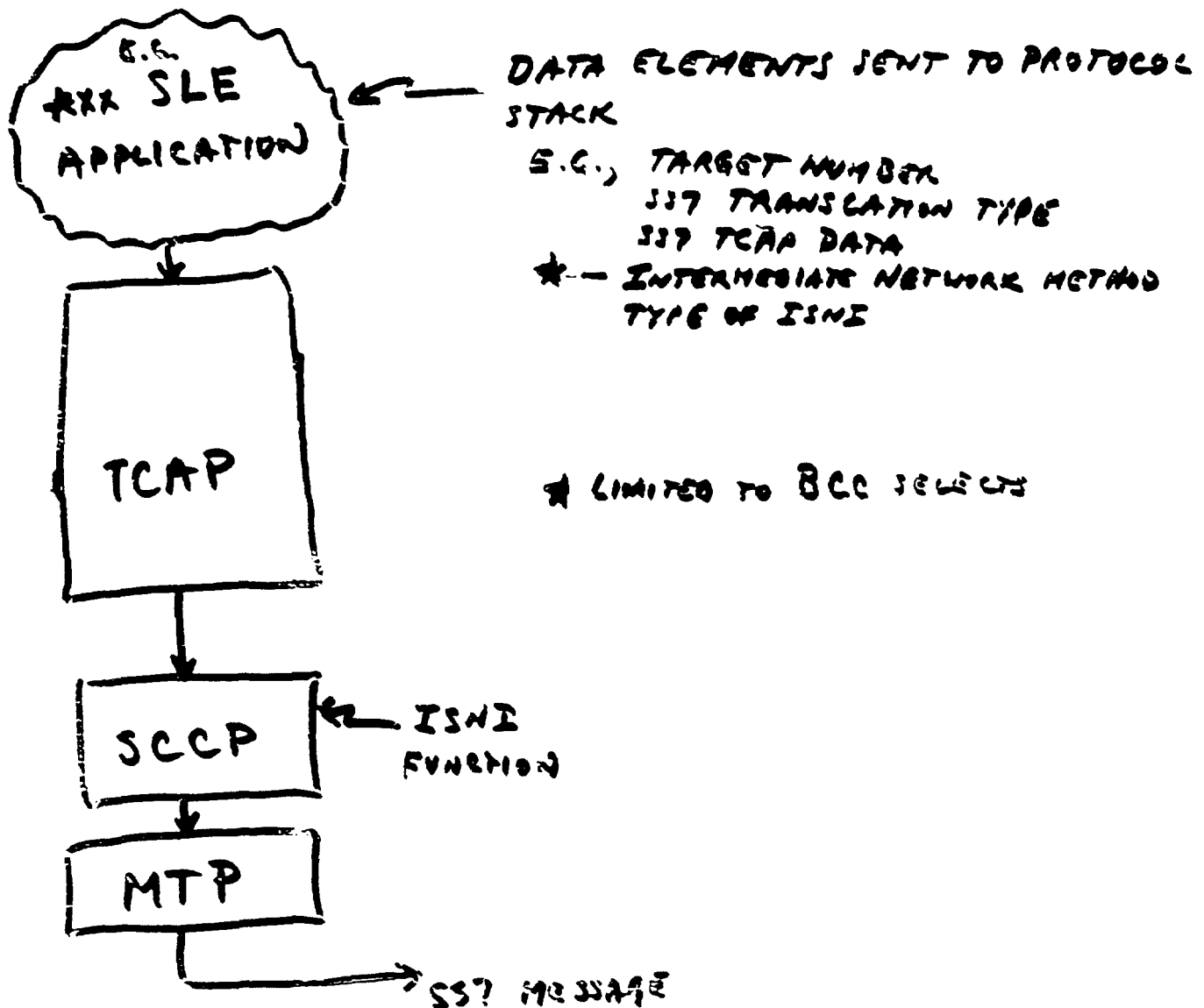
- *1. **ISSUE STATEMENT:** TA-NWT-000220, Issue 4, concerning SS7 TCAP switch-to-switch messages, specifies the routing and selection of an internetwork SS7 transport network via the network chosen by the LEC, and does not include network selection based on user presubscription.
- *2. **SUGGESTED RESOLUTION OR OUTPUT/SERVICE DESIRED:** Explore the various technical alternatives to enable the formation and routing of SS7 non-call associated messages for CLASS internetwork, interLATA screen list editing messages in the same context as the routing of interLATA call setup messages.
- *3. **OTHER IMPACTS (if any):**
4. **CURRENT ACTIVITY:**
5. **RESOLUTION:**

UPDATED:

ICCF REFERENCES:

* To be filled in by Originator

CCS7 "SWITCH TCAP MESSAGE ROUTING"⁴³⁸



Proposed New ISNI
at ICCF30 on
11/18/93

ATTACHMENT VIII

- 7. A new Issue, "CCS7 Switch TCAP Message Routing", was proposed by Jim Joerger, MCI. Jim noted that he proposed a similar new Issue at ICCF30, which his proposal today clarifies.
8. This proposed Issue requests that a Workshop be formed to develop language that would revise the technical requirements to select and route internetwork, interLATA TCAP Signaling messages according to equal access means
9. It was suggested that TA 606 describes the possible technical solutions for Carrier selection at the message level, and that the decision to use the BCC Select method as described in TA 220 is a business policy one that the local exchange carrier is entitled to make.
10. MCI noted that they do not agree with the statement in Point Noted #9, and further that they understand that Bell Atlantic and others are treating this as an issue that needs to be resolved in the regulatory arena.
11. Bell Atlantic responded to Point Noted #10 that they do not believe this is a regulatory or a technical issue.
12. MCI does not agree with Bell Atlantic but interprets Bell Atlantic's point as being that technical changes are not required because they were not mandated by a regulatory agency.
13. USTA indicated for Independent Telephone Companies that this issue is purely a business decision and has nothing to do with any regulatory arena.

Agreement Reached:

- 5. It was agreed that there is not consensus to accept the proposed new Issue, "CCS7 Switch TCAP Message Routing".

Points Noted:

14. In response to a request to document statements of those Companies who did not support acceptance of the proposed new Issue "CCS7 Switch TCAP Message Routing", Bell Atlantic, U S WEST, and USTA stated for the record that they consider routing of internetwork interLATA non-call-setup to be official communications and thus a business policy decision that the LEC is entitled to make.

During meeting notes review Ameritech indicated that they also agree with this statement.

Pacific Bell indicated that they will provide a written response to this request.

357
ICCF ISSUE IDENTIFICATION FORM
ISSUE TITLE:
CCS7 SWITCH TCAP MESSAGE ROUTING

ISSUE ORIGINATOR: J. Joergler
COMPANY: MCI
TELEPHONE #: 214-918-5137
REQUESTED RESOLUTION DATE: ASAP

ISSUE #:
DATE SUBMITTED: 3/17/84
DATE ACCEPTED:
WORKSHOP ASSIGNED:
CURRENT STATUS:
RESOLUTION DATE:

1. **ISSUE STATEMENT:** TA-NWT-000220, Issue 4 concerning SS7 TCAP switch-to-switch messages, specifies the routing and selection of an Internetwork SS7 transport network via the network chosen by the LEC, and does not include network selection based on user presubscription. The specification should include the capability to select and route the internetwork. InterLATA TCAP signaling messages associated with this service according to equal access means because the signaling actions are being taken as a result of end-user actions.
2. **SUGGESTED RESOLUTION OR OUTPUT DESIRED:** Establish a Workshop/Task Group to develop language which revise the technical requirements to enable the formation and routing of SS7 non-call associated messages for inter-network, interLATA screen list editing messages in the same context as the routing of interLATA call setup messages.
3. **OTHER IMPACTS:**
4. **CURRENT ACTIVITY:**
5. **RESOLUTION:**

TCAP EQUAL ACCESS - SCREEN LIST EDITING

NEW BUSINESS PRESENTATION

ICCF #31

MARCH 16-17, 1994

J. JOERGER
MCI
ICCF #31

TCAP EQUAL ACCESS - SCREEN LIST EDITING

- **SLE SERVICE FEATURES:**
 - END USER ABILITY TO CONTROL CALL FEATURES THAT USE “LISTS” E.G., SELECTIVE CALL ACCEPTANCE / REJECTION
 - END USER MAINTAINS LIST IN LEC SWITCH
 - LIST BASED ON “DIRECTORY NUMBERS” OR “DNs”
 - SS7 SIGNALING REQUIRED TO CHECK INTER-SWITCH DN_s
 - » CHECK:
 - DN_s ARE ACTIVE LINES IN SOME SWITCH
 - DN_s BEING ADDED LIST USE VALID NPA-NXX
 - DN BEING ADDED WORKS FROM SS7-CAPABLE SWITCH
 - PRESENTATION FOCUS IS ON SS7 INTER-SWITCH, INTERLATA SCREEN LIST EDITING MESSAGES

J. JOERGER
MCI
ICCF #31

TCAP EQUAL ACCESS - SCREEN LIST EDITING

- **TR-606 PROVIDES GENERIC ROUTING CAPABILITIES**
 - SUPPORTS BOTH OPTIONS: BCC SELECT AND END-USER PIC
- **TA-220 PROVIDES SPECIFIC SLE ROUTING RULES TO CONTROL TR-606 PROCEDURES**

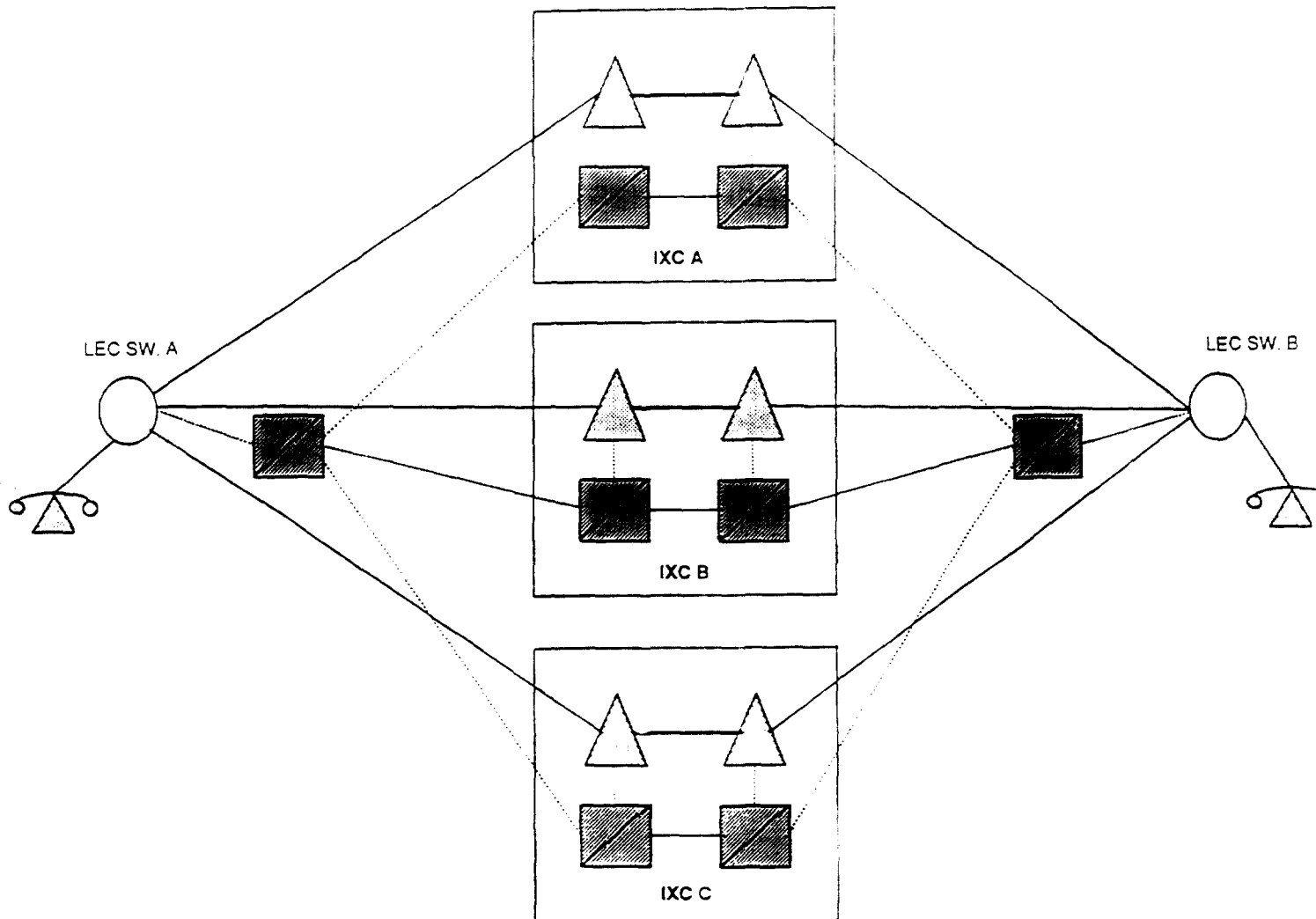
TCAP EQUAL ACCESS - SCREEN LIST EDITING

- **ISSUE:**

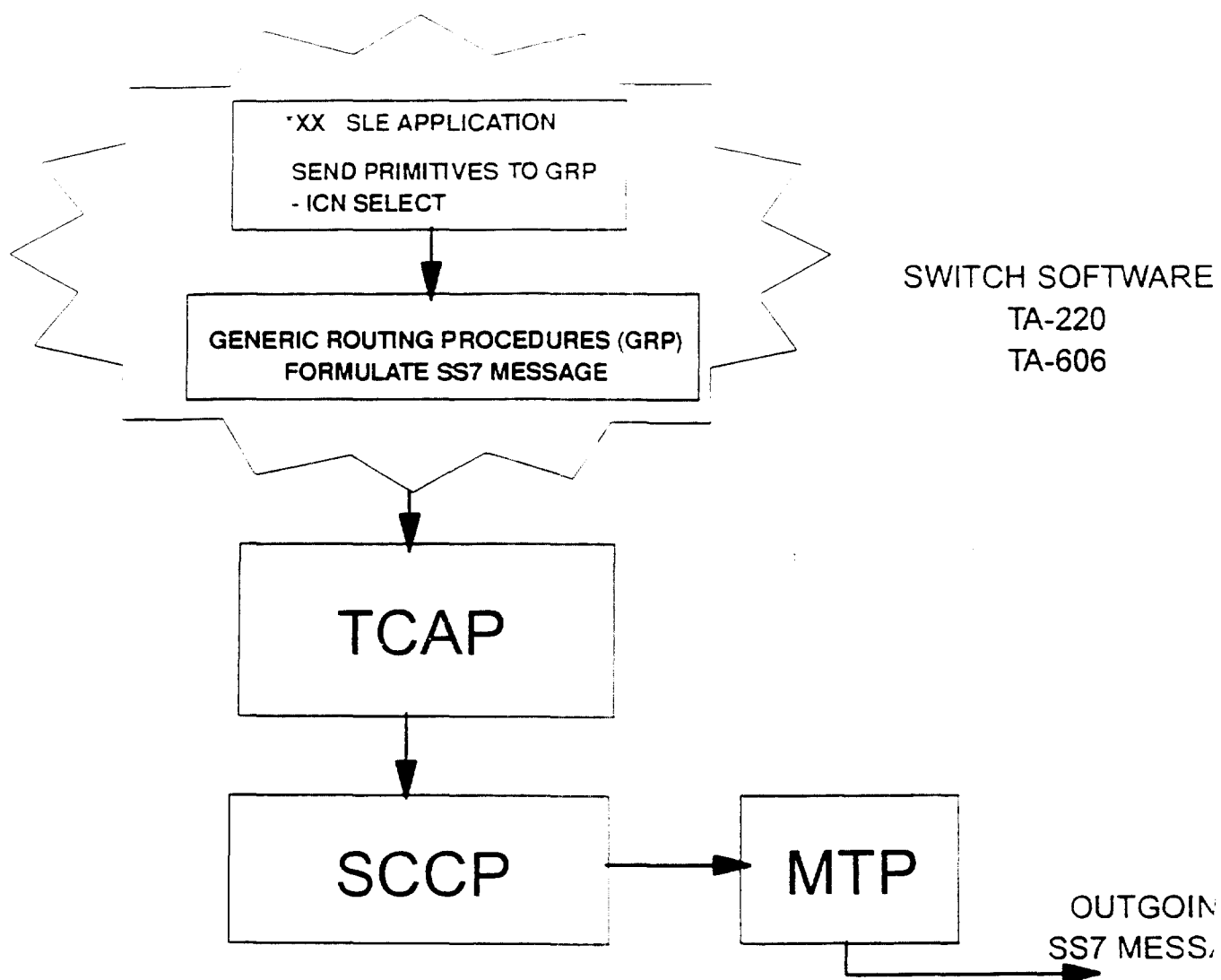
- **TA-NWT-000220 (ISSUE 4, JUNE 1993) SECTION 3.3.4.4 SHOULD BE REVISED TO INCLUDE MFJ INTENTIONS**
 - » **TCAP INFORMATION PRIMITIVE FOR “ICN SELECTION” CURRENTLY SPECIFIES “BCC-SELECT” METHOD TO DETERMINE MESSAGE ROUTING**
 - » **REVISE PRIMITIVE LIST TO INCLUDE MESSAGE ROUTING TO END-USER PRESUBSCRIBED CARRIER**
 - » **BOTH METHODS ARE SUPPORTED IN TA-NWT-000606, LSSGR CCS REQUIREMENTS**

J. JOERGER
MCI
ICCF #31

TCAP EQUAL ACCESS -SCREEN LIST EDITING



TCAP EQUAL ACCESS -SCREEN LIST EDITING



TCAP EQUAL ACCESS - SCREEN LIST EDITING

- **MFJ APPLICABLE TEXT:**

“Telecommunications means the transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content of the information as sent and received, by means of electromagnetic transmission medium, including all instrumentalities, facilities, apparatus, and services (including the collection, storage, forwarding, switching, and delivery of such information) essential to such transmission.” (IV.O)

**J. JOERGER
MCI
ICCF #31**

TCAP EQUAL ACCESS - SCREEN LIST EDITING

- **MFJ APPLICABLE TEXT (cont.):**

“Interexchange telecommunications means telecommunications between a point or points located in one exchange telecommunications area and a point or points located in one or more other exchange areas or a point outside an exchange area.” (IV.K)

J. JOERGER
MCI
ICCF #31

TCAP EQUAL ACCESS - SCREEN LIST EDITING

- **MFJ APPLICABLE TEXT (cont.)**

... "no BOC shall, directly or through any affiliated enterprise:

1. provide interexchange telecommunications ... (II.D)

J. JOERGER
MCI
ICCF #31

TCAP EQUAL ACCESS - SCREEN LIST EDITING

- **MCI DOES NOT AGREE WITH LEC POSITIONS FROM ICCF #30 WHICH NOTED THAT SLE MESSAGES SHOULD BE ROUTED BASED ON BCC BUSINESS DECISIONS**
- **MCI BELIEVES THAT MFJ IS CLEAR THAT SLE MESSAGES ARE NOT "OFFICIAL" COMMUNICATIONS**

J. JOERGER
MCI
ICCF #31

MCI Comments

5/20/96

ATTACHMENT D

MCI Letter to BellCore



May 17, 1996

Ann E. Merrell
Director
LNP Project Management
Bellcore
331 Newman Sprongs Road
NVC 2X-249
Red Bank, NJ 07701-5699

SUBJECT: Bellcore LNP Industry Interaction Meeting

Ms. Merrell:

Our review of Bellcore's Local Number Portability (LNP) meeting summary listing the technical issues identified at the LNP Industry interaction meeting on April 23-24, 1996 reveals that the summary did not include a major issue brought up by MCI at the meeting. This issue concerns the use of the Query-on-Release (QoR) mechanism to implement LNP. At the meeting, MCI expressed serious concerns with the use of the QoR mechanism for LNP.

The Telecommunications Act of 1996 requires that number portability be afforded in a manner that does not impair the quality, reliability, or convenience of service when switching service providers. Hence, the basic principle that must be adhered to when developing network requirements is that ported and non-porting numbers are treated the same, and anything Bellcore develops must ensure that this principle is followed. Any technology or capability to be developed and deployed which treats calls to these classes of customers differently does not comport with the intent of the Act. It does not matter if the relative impact to either class of customer is minimized, or is not measurable or perceivable. It is unacceptable to establish some kind of parameters of performance that calls must meet and then claim that Bellcore requirements meet that standard. It is the existence of any difference that is unacceptable.

The QoR approach violates the principle outlined in the Telecommunication Act since the routing to ported customers is treated inequitably. The calls to ported numbers have to be first routed to the incumbent LEC's (ILEC's) network before the routing number can be derived to terminate the calls in the competitive LEC's (CLEC's) network. Thus, QoR puts CLECs at a competitive disadvantage as far as the quality of calls to ported customers is concerned. In addition, it introduces extra cost, complexity, and uncertainty in LNP implementation. Therefore, MCI can not support Bellcore's requirements development for the QoR approach, either as an intranetwork or as an internetwork capability, for the implementation of LNP. The only competitively neutral technical solution is the Location Routing Number (LRN) with an AIN/IN trigger. Bellcore should help the industry by adopting only LRN approach in its development work.

MCI also encourages Bellcore to seriously consider MCI's position on following issues in its LNP requirements development: